

WHAT IS CLAIMED IS:

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1. A method for compressing an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, comprising:

selecting a set of N raster lines;
interleaving the pixels of each of the N raster lines; and
compressing the reformatted interleaved data.

2. The method of claim 1, wherein interleaving the pixels of the N selected raster lines comprises:

10 selecting a next pixel along the second direction from each of the N selected raster lines;

forming at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and
storing the at least one byte.

15 3. The method of claim 1, wherein compressing the reformatted interleaved data compresses using at least one byte oriented compression technique to compress the reformatted interleaved data.

4. The method of claim 1, wherein the at least one byte oriented compression technique is at least one of LWZ, ZIP and Compress.

20 5. A method for decompressing compressed image data to form a restored image, comprising:

inputting compressed interleaved data;
decompressing the compressed interleaved data; and
un-interleaving the decompressed interleaved data to create raster
25 image data for the restored image, the raster image data defining a plurality of raster lines extending in a final direction, each raster line having a plurality of pixels extending in a second direction.

6. The method of claim 5, wherein un-interleaving the decompressed interleaved data to the raster image data of the restored image, comprises:

30 selecting at least one next byte of the decompressed interleaved data;
and

distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image.

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7. An image compression system that compresses an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, the system comprising;

a binary data reformatter that reformats raster image data of the original image by interleaving pixels of the original image; and

a compressor that compresses the interleaved raster image data.

8. The image compression system of claim 7 wherein interleaving the pixels of the N selected raster lines, the system:

selects a next pixel along the second direction from each of the N selected raster lines;

forms at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

stores the at least one byte.

9. The image compression system of claim 7, wherein the compressor is a byte-oriented compressor.

10. The image compression system of claim 7, wherein the compressor uses at least one of LWZ, ZIP and Compress.

11. An image decompression system that decompresses compressed image data to form a restored image, the system comprising:

a decompressor that decompresses the compressed interleaved data;

an inverse binary data reformatter that un-interleaves the interleaved data and forms a raster image data of the restored image by selecting at least one next byte of the decompressed interleaved data and distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image; and

an output controller that outputs the un-interleaved data to an output device.

12. The original image decompression system of claim 11, wherein the decompressor is a byte-oriented compressor technique decompressor.